Brownfield Assessment of the Former Rose City Plating Site, Portland, Oregon

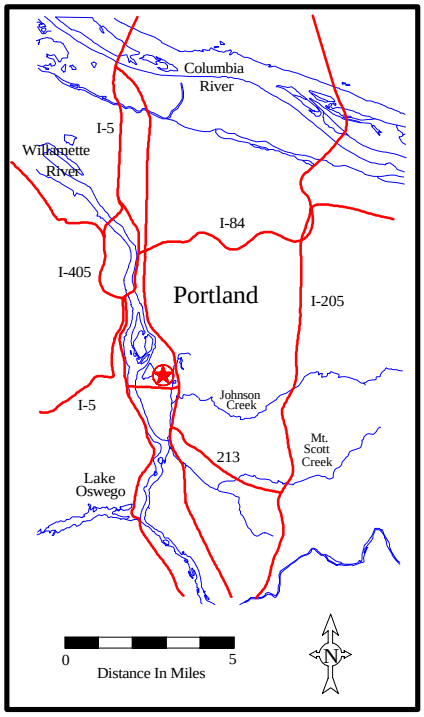
Project Overview

With funding from U.S. EPA Region 10, the Oregon Department of Environmental Quality (DEQ) conducted a Brownfield Assessment at the 0.35-acre former Rose City Plating site in the Sellwood district of Portland (see map below). DEQ initiated this project in June 1999, after Multnomah County asked DEQ and EPA to determine if past metal-plating operations had caused subsurface contamination at the site, and what further actions might be needed to facilitate the property's sale and redevelopment. At no cost to the county, DEQ's Site Assessment Program completed the investigation in September 1999, concluding that the moderate contamination found in portions of the property could be remediated through DEQ's Voluntary Cleanup Program (VCP), without affecting new residential and commercial uses proposed for the site.

DEQ carried out this project under an EPA-funded *Targeted Brownfield Assessment* program, which is designed to assist community-supported redevelopment of abandoned or underused commercial/industrial properties that are in need of environmental investigation.

Site Background

The site is located in a small commercial district that is surrounded by residences. Two electroplating businesses operated in the large on-site building between 1951 and 1994, with Rose City Plating being the most recent. When Rose City Plating failed to pay property taxes for six consecutive years, Multnomah County foreclosed on the site. Soon after this 1994 foreclosure, DEQ discovered an array of abandoned hazardous wastes within the building and, because of the dangers they posed, conducted an emergency removal. Over a five-month period, DEQ's contractors removed 24,000 gal. of plating wastes, 37 tons of sludges, and 58 cu. yd. of contaminated debris. Post-removal sampling revealed local pockets of lead and other metals in shallow soils. Groundwater was not sampled (and as a result will need to be evaluated in conjunction with future sale of the property -- see "The Next Steps" section below).



Site Location - Former Rose City Plating Site

Following foreclosure, the county began planning for the property's auction, and in 1997 negotiated a Prospective Purchaser Agreement (PPA) with DEQ to be sent to potential bidders along with other auction information. The PPA required the winning bidder to reimburse DEQ for a portion of its past removal costs, and enter DEQ's VCP to assess specified environmental and safety issues, including potential groundwater contamination. The auction occurred in August 1998. The successful bidder, a developer, later learned of a possible drywell that was neither revealed in prior DEQ investigations nor visible on-site, and asked the county to delay property transfer until this issue could be investigated. Multnomah County then requested a Brownfield Assessment from DEQ and EPA, with the understanding that the county would incur no financial or environmental liability as a result of the assessment. The successful bidder agreed to reimburse EPA for Brownfield Assessment costs when and if his company took title to the property.

What We Did

DEQ's objective was to assess likely contaminant source areas, such as the possible drywell location and former plating bays, in anticipation of future construction/excavation activities. First, DEQ arranged for the disposal of about 200 gal. of plating wastes left over from the 1994 removal action. Then, after coring through the building's concrete floor to gain access to underlying soils where contamination was suspected, DEQ collected 48 samples from 15 borings installed to depths of about 10 ft. Most of these samples were soil; one sample consisted of sump sludge found in a plating bay boring, and another consisted of concrete slurry from the coring operation. Finally, using its direct-push drill probe, DEQ attempted to collect a groundwater sample, but abandoned that effort after failing to reach water at the maximum probing depth of 65 ft.

What We Found

An EPA Contract Laboratory analyzed all samples for total metals. One soil sample and the sludge sample were also analyzed for volatile organic compounds (VOCs). Results showed elevated levels of cadmium, chromium, lead, and nickel in the upper three feet of soil around the plating bay. The results also suggested the presence of low levels of chlorinated solvents in shallow soil. DEQ concluded that the small volume of sump residue beneath the plating area might require disposal as a hazardous waste. Finally, DEQ determined that portions of the concrete floor could be contaminated, based on elevated metal levels in the slurry sample.

The Next Steps

DEQ's Brownfield Assessment has filled important data gaps and refined further-action needs at the site. The developer is considering the results of the assessment in deciding whether to follow through with the property's purchase. Under a Letter Agreement with DEQ's VCP, any new owner will need to: 1) assess possible groundwater impacts and abandon a former industrial well; 2) assess the extent of metals beneath the plating bays and screen for VOCs in this area; 3) manage lead-impacted soil identified after the 1994 removal action; and 4) make hazardous waste determinations for sump sludge and concrete (depending on final demolition and excavation plans). These actions will ensure that protection of human health and the environment accompany the site's redevelopment into the types of commercial/residential uses that will benefit the community.

For more information or for a copy of the Brownfield Assessment report, contact Gil Wistar, Oregon DEQ - Portland: (503) 229-5512.